

=> fil reg

FILE 'REGISTRY' ENTERED AT 07:37:00 ON 07 MAR 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 MAR 2007 HIGHEST RN 924962-30-1

DICTIONARY FILE UPDATES: 5 MAR 2007 HIGHEST RN 924962-30-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

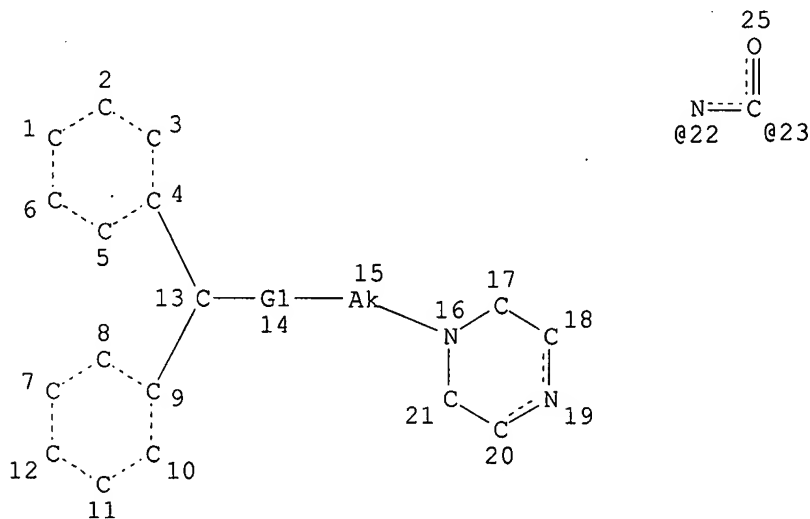
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d sta que 123

L15 STR



VAR G1=O/N/22-13 23-15/23-13 22-15

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 16 4

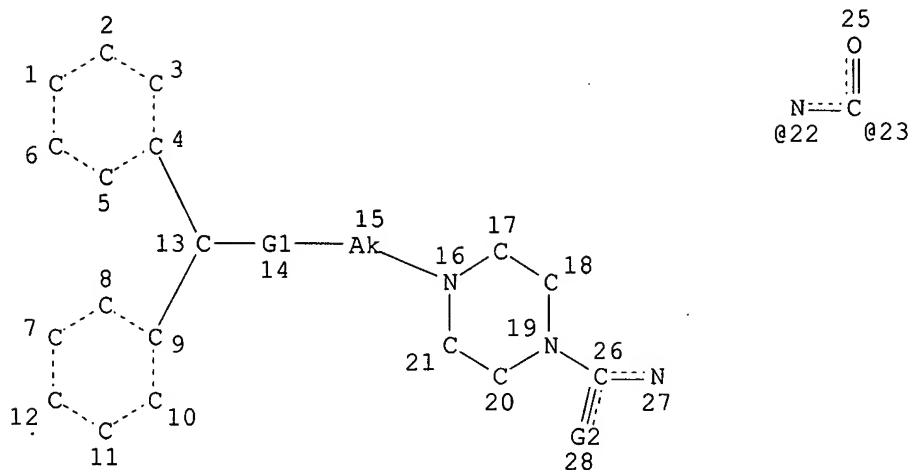
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L17 2681 SEA FILE=REGISTRY SSS FUL L15

L18

STR



VAR G1=O/N/22-13 23-15/23-13 22-15

VAR G2=O/S

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

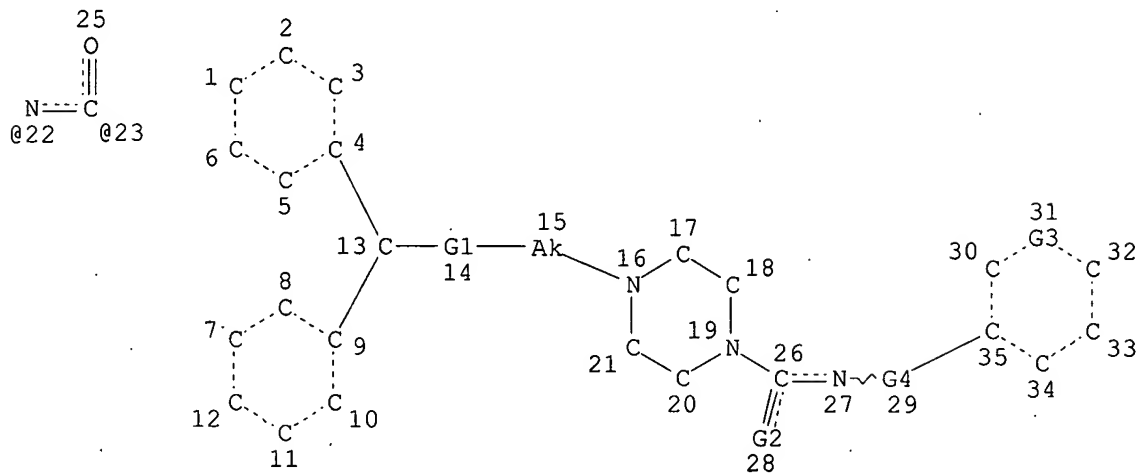
RSPEC 16 4

NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

L20 162 SEA FILE=REGISTRY SUB=L17 SSS FUL L18

L21 STR



VAR G1=O/N/22-13 23-15/23-13 22-15

VAR G2=O/S

VAR G3=C/N

REP G4=(1-20) A

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 30 19 4
NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

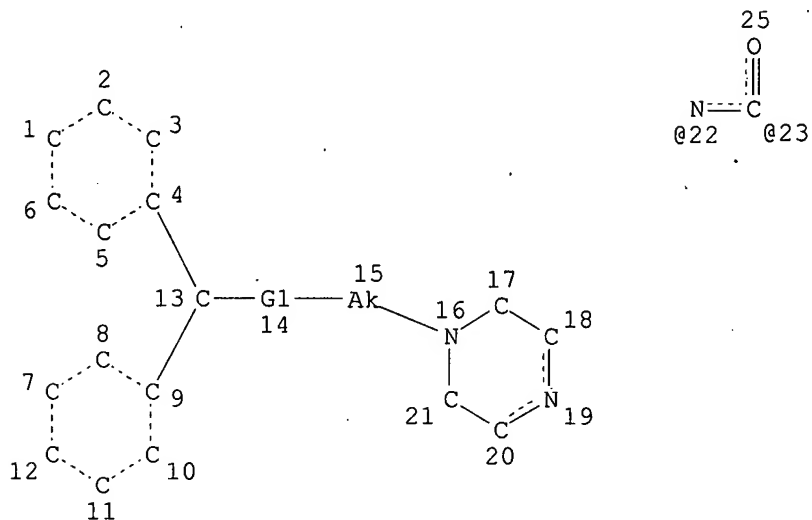
L23 16 SEA FILE=REGISTRY SUB=L20 SSS FUL L21

100.0% PROCESSED 136 ITERATIONS
SEARCH TIME: 00.00.01

16 ANSWERS

=> d sta que 133

L15 STR



VAR G1=O/N/22-13 23-15/23-13 22-15

NODE ATTRIBUTES:

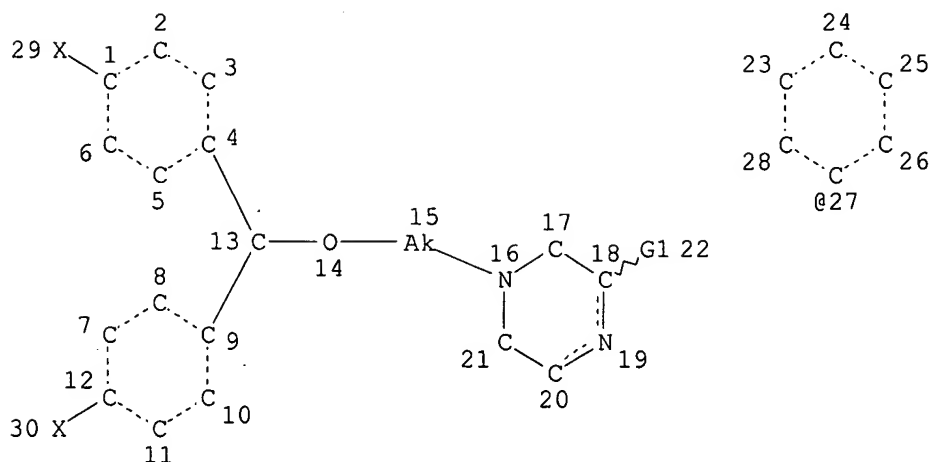
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 16 4
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L17 2681 SEA FILE=REGISTRY SSS FUL L15
L28 STR



VAR G1=H/O/27

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

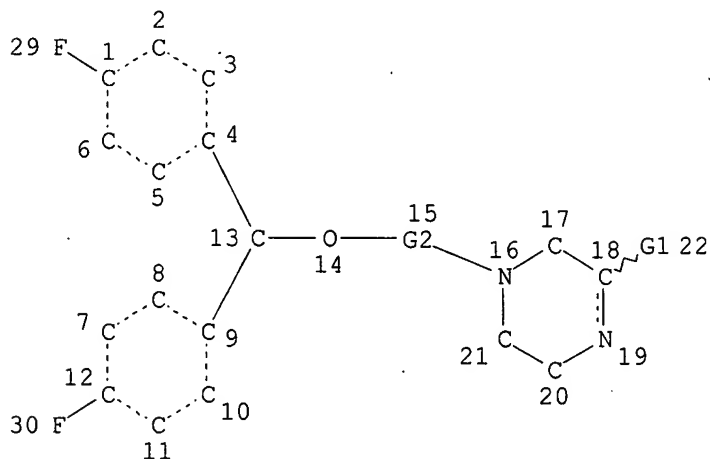
RSPEC 16 4 23

NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L30 788 SEA FILE=REGISTRY SUB=L17 SSS FUL L28

L31 STR



VAR G1=H/O/31

REP G2=(4-4) CH2

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 19

CONNECT IS M1 RC AT 31

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY UNS AT 31

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E6 C AT 31

GRAPH ATTRIBUTES:

RSPEC 16 4
NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L33 42 SEA FILE=REGISTRY SUB=L30 CSS FUL L31

100.0% PROCESSED 54 ITERATIONS
SEARCH TIME: 00.00.01

42 ANSWERS

=> d his

(FILE 'HOME' ENTERED AT 07:11:07 ON 07 MAR 2007)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:11:20 ON 07 MAR 2007

L1 1 S US20050222166/PN OR US2004-814118#/AP, PRN
E ELMALEH/AU
L2 137 S E8-E11
E SONGWOON/AU
L3 1 S E4
E SONG WOON/AU
L4 2 S E3
E CHOI/AU
L5 7 S E3
E CHOI S/AU
L6 482 S E3
L7 93 S E30
E CHOI SONG/AU
L8 10 S E3
E CHOI NAME/AU
L9 92 S E4
E SONG/AU
L10 5 S E3
E SONG W/AU
L11 97 S E3,E5
E SONG NAME/AU
L12 31 S E4
E FISHMAN/AU
L13 20 S E4,E7,E16,E17
SEL RN L1

FILE 'REGISTRY' ENTERED AT 07:14:21 ON 07 MAR 2007

L14 77 S E1-E77
L15 STR
L16 50 S L15
L17 2681 S L15 FUL
SAV L17 SACKKEY814A/A
L18 STR L15
L19 10 S L18 SAM SUB=L17
L20 162 S L18 FUL SUB=L17
SAV L20 SACKKEY814B/A
L21 STR L18
L22 2 S L21 SAM SUB=L20
L23 16 S L21 FUL SUB=L20
SAV L23 SACKKEY814C/A
L24 12 S L23 NOT NC3-NCSC3/ES
L25 4 S L24 NOT 2 3 DIOXO

L26 3 S L25 NOT C35H36N4O3
L27 13 S L23 NOT L26
L28 STR L15
L29 50 S L28 SAM SUB=L17
L30 788 S L28 FUL SUB=L17
SAV L30 SACKKEY814D/A
L31 STR L28
L32 5 S L31 CSS SAM SUB=L30
L33 42 S L31 CSS FUL SUB=L30
SAV L33 SACKKEY814E/A
L34 18 S L33 AND (C31H36F2N2O5 OR C28H30F3N3O4S OR C29H32F2N2O2 OR C27
L35 24 S L33 NOT L34
L36 27 S L26,L35
L37 15 S L14 AND L36
L38 12 S L36 NOT L37

FILE 'HCAOLD' ENTERED AT 07:34:28 ON 07 MAR 2007

L39 0 S L36

FILE 'HCAPLUS' ENTERED AT 07:34:32 ON 07 MAR 2007

L40 2 S L36
L41 2 S L40 AND L1-L13
E SANG/AU
L42 2 S E3
E SANG 2/AU
E SANG W/AU
L43 3 S E3
E SANG WOON/AU
E SANG NAME/AU
L44 1 S E4
E SANGWOON/AU
E CHOI/AU
L45 7 S E3
E CHOI S/AU
E CHOI SANG/AU
L46 3 S E3
E CHOI SANG W/AU
L47 147 S E3,E4,E7
E CHOI SANGW/AU
L48 1 S E6
L49 1 S L40 AND L42-L48
L50 2 S L40,L41,L49

FILE 'USPATFULL' ENTERED AT 07:36:46 ON 07 MAR 2007

L51 1 S L36

FILE 'REGISTRY' ENTERED AT 07:37:00 ON 07 MAR 2007

=> fil uspatful

FILE 'USPATFULL' ENTERED AT 07:37:23 ON 07 MAR 2007

CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 6 Mar 2007 (20070306/PD)

FILE LAST UPDATED: 6 Mar 2007 (20070306/ED)

HIGHEST GRANTED PATENT NUMBER: US7188369

HIGHEST APPLICATION PUBLICATION NUMBER: US2007050874

CA INDEXING IS CURRENT THROUGH 6 Mar 2007 (20070306/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 6 Mar 2007 (20070306/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2006

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2006

=> d 151 bib abs hitstr

L51 ANSWER 1 OF 1 USPATFULL on STN
AN 2005:255668 USPATFULL
TI Diagnostic and therapeutic alkyl piperidine/piperazine compounds and process
IN Elmaleh, David R., Newton, MA, UNITED STATES
Songwoon, Choi, Sharon, MA, UNITED STATES
Fishman, Alan J., Boston, MA, UNITED STATES
PI US 2005222166 A1 20051006
AI US 2004-814118 A1 20040331 (10)
DT Utility
FS APPLICATION
LREP Paul J. Cook, 115 Pine Street, Manchester, MA, 01944, US
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1481
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Piperidine or piperazine compounds useful for treating neurodegenerated diseases characterized by the lack of dopamine neurons activity or for imaging the dopamine neurons are provided. The compounds are characterized by the formulae: ##STR1## ##STR2## ##STR3## ##STR4## ##STR5## wherein:

n is an integer of 1 to 6; X, Y, Z.sub.1 and Z.sub.2 can be the same or different and are hydrogen, halo, haloalkyl, alkyl, aryl, (C.sub.1-C.sub.6) alkoxy, N-alkyl, (C.sub.2-C.sub.6) acyloxy, N-alkylene, --SH, --SR, wherein R is from the same group as R.sub.1 and R.sub.2 and can be the same or different than R.sub.1 and R.sub.2, amino, nitro, cyano, hydroxy, C(.dbd.O) OR.sub.6, --C(.dbd.O) NR.sub.5R.sub.4, NR.sub.3R.sub.2, or S(α).sub.k R.sub.1 wherein .sub.k is 1 or 2, and R.sub.1 to R.sub.6 are independently hydrogen or (C.sub.1-C.sub.6) alkyl;
R.sub.1, and R.sub.2 can be the same or different and are hydrogen, (C.sub.1-C.sub.6) alkyl, hydroxyalkyl or mercaptoalkyl, --C(.dbd.O) OR.sub.1, cyano, (C.sub.1-C.sub.6) alkenyl, (C.sub.2-C.sub.6) alkynyl, or 1,2,4-oxadiazol-5-yl optionally substituted at the 3-position by Z.sub.4 wherein any (C.sub.1-C.sub.6) alky, (C.sub.1-C.sub.6) alkanoyl, (C.sub.2-C.sub.6) alkenyl or (C.sub.2-C.sub.6) alkynyl can optionally be substituted by 1, 2 or 3 Z;
R.sub.7 can be hydrogen, O or phenyl
R.sub.8 can be hydrogen, phenyl, halophenyl, nitrophenyl, pyridyl, piperonyl or sulfoxonitrophenyl
Z.sub.4 is (C.sub.1-C.sub.6) alkyl or phenyl, optionally substituted by 1, 2 or 3 Z.sub.1 W is O or S
T is amino or C.sub.1-C.sub.6 aminoalkyl A is N or C
T is C.sub.1-C.sub.6 alkyl or sulfonyl and
V is alkyl (C.sub.0-C.sub.6), alkenyl, alkynyl, haloaryl, alkyl phenol, alkyl halophenyl, and R.sub.1 or R.sub.2 as indicated above and ϕ is phenyl, naphthyl, thienyl or pyridinyl.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 728945-86-6P, 2-Oxo-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-88-8P, 2-Phenyl-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-90-2P, 1-Phenyl-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-92-4P, 1-(2-Fluorophenyl)-4-[4-[bis(4-

fluorophenyl)methoxy]butyl]piperazine oxalate **728945-94-6P**,
 1-(4-Fluorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine
 oxalate **728945-96-8P**, 1-(2-Chlorophenyl)-4-[4-[bis(4-
 fluorophenyl)methoxy]butyl]piperazine oxalate **728945-98-0P**,
 1-(3-Chlorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine
 oxalate **728946-00-7P**, 1-(4-Chlorophenyl)-4-[4-[bis(4-
 fluorophenyl)methoxy]butyl]piperazine oxalate **728946-08-5P**,
 1-(4-Nitrophenyl)-4-[1-[bis(4-fluorophenyl)methoxy]butan-4-yl]piperazine
 oxalate **728946-10-9P**, 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]-4-
 (pyridin-2-yl)piperazine oxalate **728946-16-5P**,
 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]-4-(4-
 nitrophenylsulfonyl)piperazine oxalate **866006-23-7P**
866006-25-9P

(drug candidate; preparation of diagnostic and therapeutic alkyl
 piperidine/piperazine compds. for neuron imaging and treating
 neurodegenerative disease)

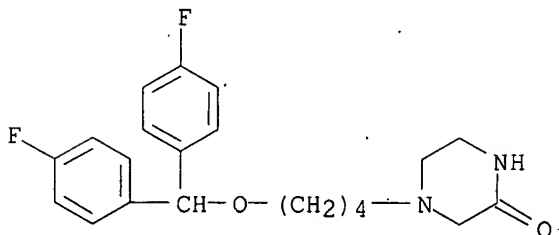
RN 728945-86-6 USPATFULL

CN Piperazinone, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-, ethanedioate (1:1)
 (9CI) (CA INDEX NAME)

CM 1

CRN 728945-85-5

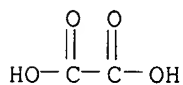
CMF C21 H24 F2 N2 O2



CM 2

CRN 144-62-7

CMF C2 H2 O4



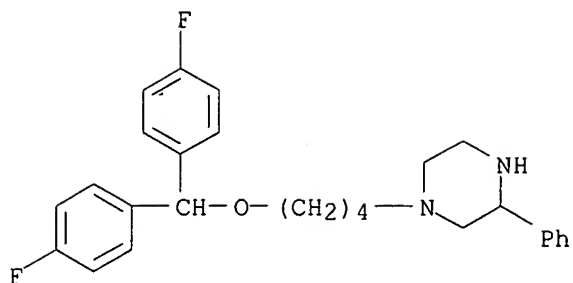
RN 728945-88-8 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-3-phenyl-,
 ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-87-7

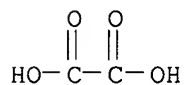
CMF C27 H30 F2 N2 O



CM 2

CRN 144-62-7

CMF C2 H2 O4



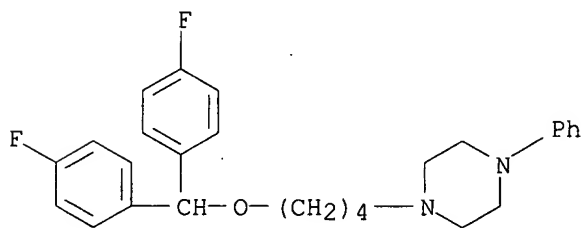
RN 728945-90-2 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-phenyl-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-89-9

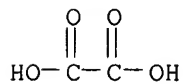
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CM 2

CRN 144-62-7

CMF C2 H2 O4



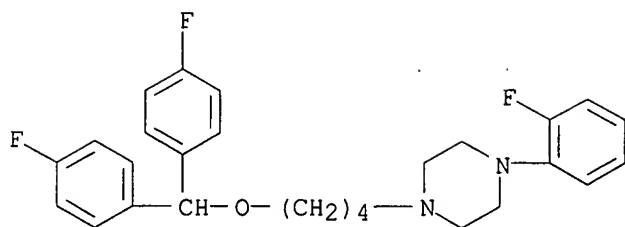
RN 728945-92-4 USPATFULL

CN Piperazine, 1-[4-[bis(2-fluorophenyl)methoxy]butyl]-4-(2-fluorophenyl)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-91-3

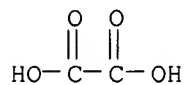
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CM 2

CRN 144-62-7

CMF C2 H2 O4



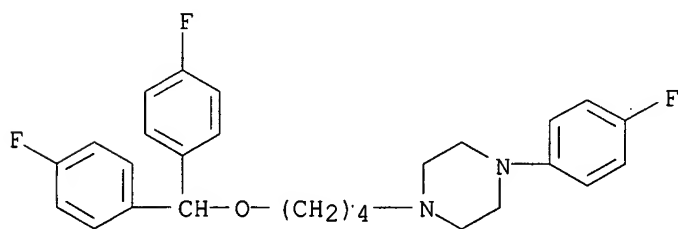
RN 728945-94-6 USPATFULL

CN Piperazine, 1-[4-[[bis(4-fluorophenyl)methoxy]butyl]-4-(4-fluorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-93-5

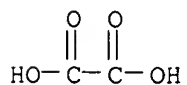
CMF C27 H29 F3 N2 O



CM 2

CRN 144-62-7

CMF C2 H2 O4



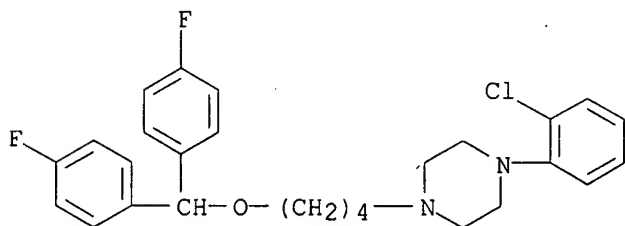
RN 728945-96-8 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-chlorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-95-7

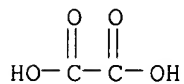
CMF C27 H29 Cl F2 N2 O



CM 2

CRN 144-62-7

CMF C2 H2 O4



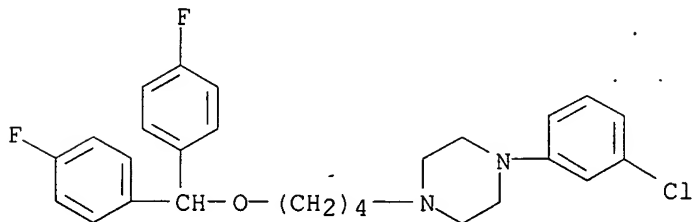
RN 728945-98-0 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(3-chlorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-97-9

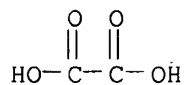
CMF C27 H29 Cl F2 N2 O



CM 2

CRN 144-62-7

CMF C2 H2 O4



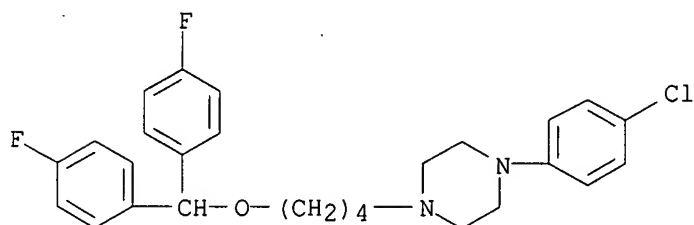
RN 728946-00-7 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-chlorophenyl)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-99-1

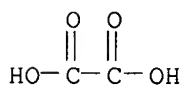
CMF C27 H29 Cl F2 N2 O



CM 2

CRN 144-62-7

CMF C2 H2 O4



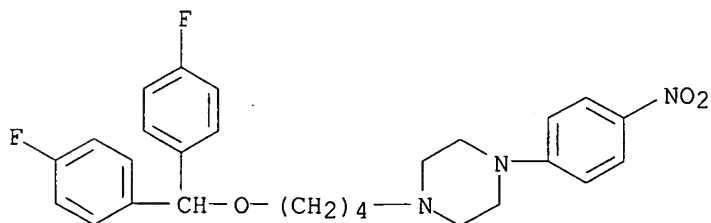
RN 728946-08-5 USPATFULL

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-nitrophenyl)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

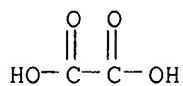
CRN 728946-07-4

CMF C27 H29 F2 N3 O3



CM 2

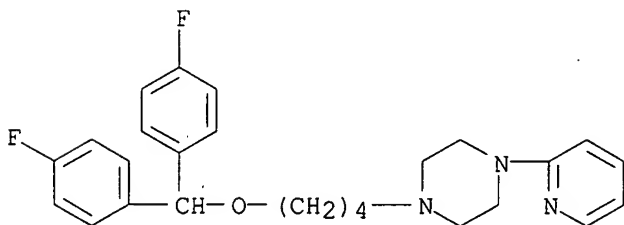
CRN 144-62-7
CMF C2 H2 O4



RN 728946-10-9 USPATFULL
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-pyridinyl)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

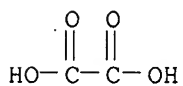
CM 1

CRN 728946-09-6
CMF C26 H29 F2 N3 O



CM 2

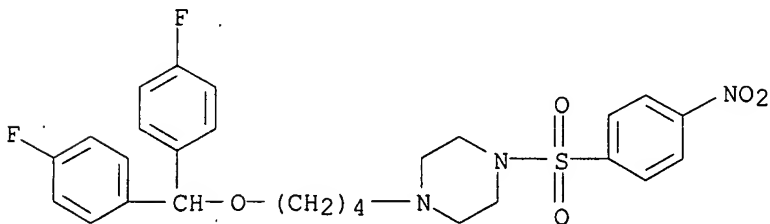
CRN 144-62-7
CMF C2 H2 O4



RN 728946-16-5 USPATFULL
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-[(4-nitrophenyl)sulfonyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

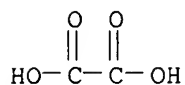
CRN 728946-15-4
CMF C27 H29 F2 N3 O5 S



CM 2

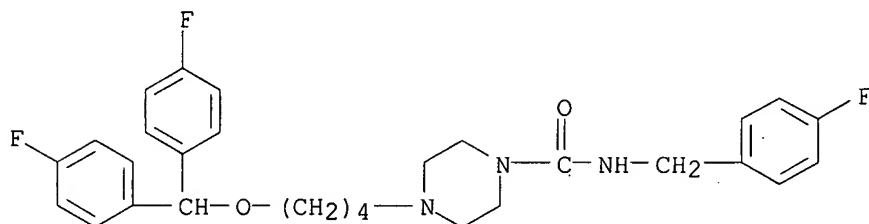
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CMF C2 H2 O4



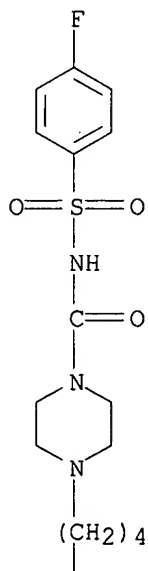
RN 866006-23-7 USPATFULL

CN 1-Piperazinecarboxamide, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-N-[(4-fluorophenyl)methyl]- (9CI) (CA INDEX NAME)



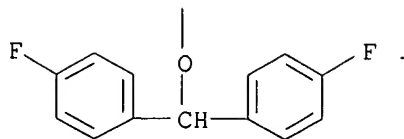
RN 866006-25-9 USPATFULL

CN 1-Piperazinecarboxamide, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-N-[(4-fluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



PAGE 1-A

PAGE 2-A

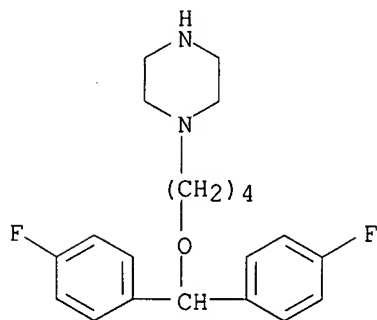


IT **728945-84-4P**, 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]piperazine
 dioxalate
 (drug candidate; preparation of diagnostic and therapeutic alkyl
 piperidine/piperazine compds. for neuron imaging and treating
 neurodegenerative disease)
 RN 728945-84-4 USPATFULL
 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-, ethanedioate (1:2)
 (9CI) (CA INDEX NAME)

CM 1

CRN 728945-83-3

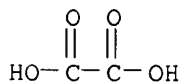
CMF C21 H26 F2 N2 O



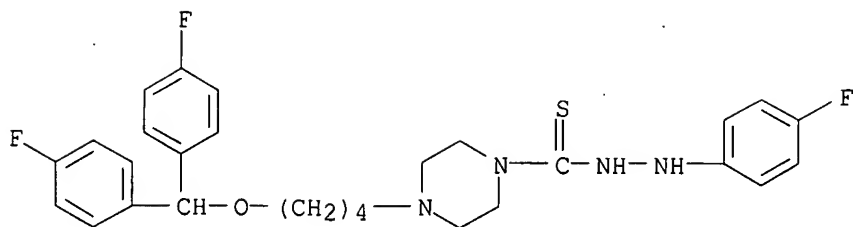
CM 2

CRN 144-62-7

CMF C2 H2 O4



IT **866006-41-9D**, complexes with technetium-99m or iodine isotopes
 (preparation of diagnostic and therapeutic alkyl piperidine/piperazine
 compds. for neuron imaging and treating neurodegenerative disease)
 RN 866006-41-9 USPATFULL
 CN 1-Piperazinecarbothioic acid, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-,
 2-(4-fluorophenyl)hydrazide (9CI) (CA INDEX NAME)



=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 07:37:39 ON 07 MAR 2007

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FILE LAST UPDATED: 6 Mar 2007 (20070306/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr retable tot 150

L50 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1078248 HCAPLUS

DN 143:360127

TI Preparation of diagnostic and therapeutic alkyl piperidine/piperazine compounds for neuron imaging and treating neurodegenerative disease

IN Elmaleh, David R.; Songwoon, Choi; Fishman, Alan

J.

PA USA

SO U.S. Pat. Appl. Publ., 21 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005222166	A1	20051006	US 2004-814118	20040331 <--
PRAT	US 2004-814118		20040331	<--	
OS	MARPAT 143:360127				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Piperidine or piperazine compds. useful for treating neurodegenerative diseases characterized by the lack of dopamine neurons activity or for imaging the dopamine neurons are provided. The compds. are characterized by the formulas I-V : m = 1-6; X, Y, Z1, Z2, and Z3 = H, haloalkyl, alkyl, aryl, (C1-C6) alkoxy, N-alkyl, (C2-C6) acyloxy, N-alkylene, -SH, -SR, wherein R is from the same group as R1 and R2, NH2, NO, CN, OH, COOR6, C(O)NR5R4, NR3R2, or S(O)kR1 wherein k = 1 or 2 and R1 to R6 = H or (C1-C6)alkyl; R1 and R2 = H, (C1-C6) alkyl, hydroxyalkyl or mercaptoalkyl, -COOR1, CN, (C1-C6)alkenyl, (C2-C6)alkynyl, or (un)substituted 1,2,4-oxadiazol-5-yl; R7= H, O or Ph; R8 = H, Ph, halophenyl, nitrophenyl, pyridyl, piperonyl or sulfoxonitrophenyl; W = O or S; T = NH2 or C1-C6 aminoalkyl; A = N or C; T= C1-C6 alkyl or sulfonyl; Q=NH2 or C1-C6 amino alkyl.

IT 728945-86-6P, 2-Oxo-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-88-8P, 2-Phenyl-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-90-2P, 1-Phenyl-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-92-4P, 1-(2-Fluorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-94-6P, 1-(4-Fluorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-96-8P, 1-(2-Chlorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728945-98-0P, 1-(3-Chlorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728946-00-7P, 1-(4-Chlorophenyl)-4-[4-[bis(4-fluorophenyl)methoxy]butyl]piperazine oxalate 728946-08-5P, 1-(4-Nitrophenyl)-4-[1-[bis(4-fluorophenyl)methoxy]butan-4-yl]piperazine oxalate 728946-10-9P, 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]-4-(pyridin-2-yl)piperazine oxalate 728946-16-5P, 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]-4-(4-nitrophenylsulfonyl)piperazine oxalate 866006-23-7P 866006-25-9P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of diagnostic and therapeutic alkyl piperidine/piperazine compds. for neuron imaging and treating neurodegenerative disease)

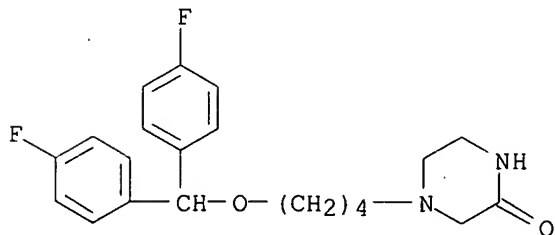
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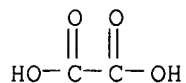
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CM 2

CRN 144-62-7

CMF C2 H2 O4



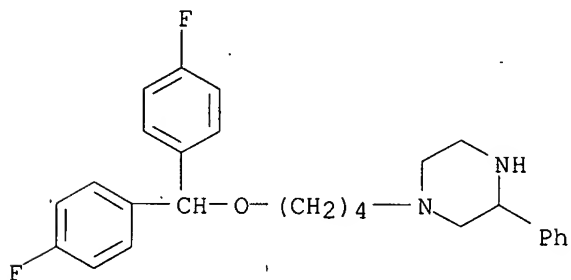
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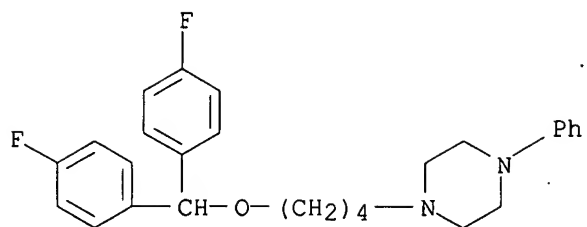
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-3-phenyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

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CRN 728945-87-7

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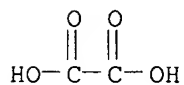




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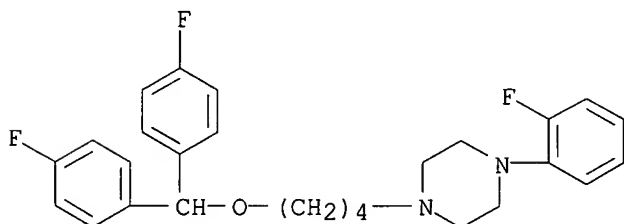
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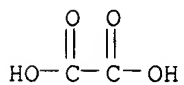
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CM 2

CRN 144-62-7

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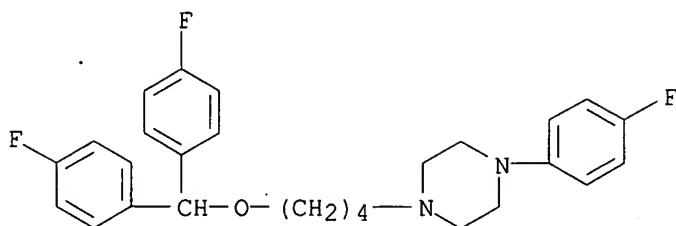


RN 728945-94-6 HCAPLUS

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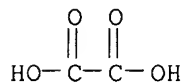
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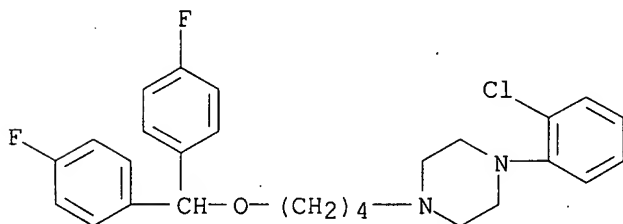
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CMF C2 H2 O4



RN 728945-96-8 HCAPLUS
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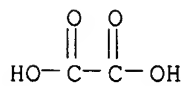
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CRN 728945-95-7
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CRN 144-62-7
CMF C2 H2 O4



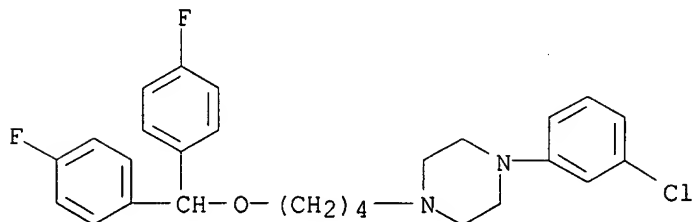
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CRN 728945-97-9

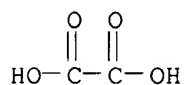
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CM 2

CRN 144-62-7

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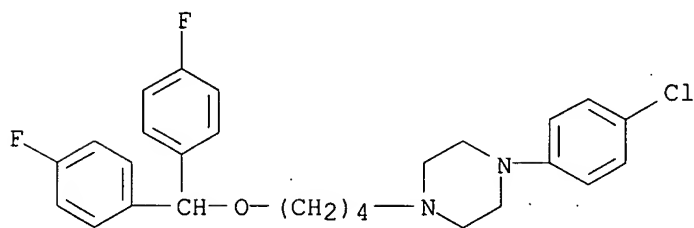
RN 728946-00-7 HCAPLUS

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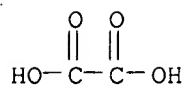
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CM 2

CRN 144-62-7

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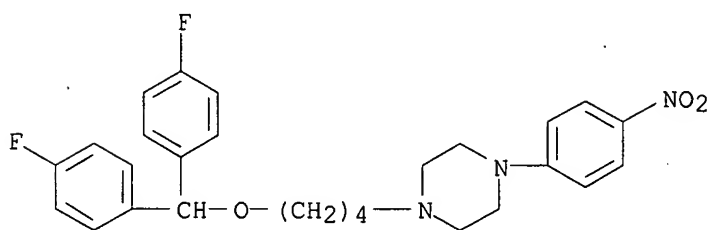
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CRN 728946-07-4

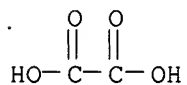
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CM 2

CRN 144-62-7

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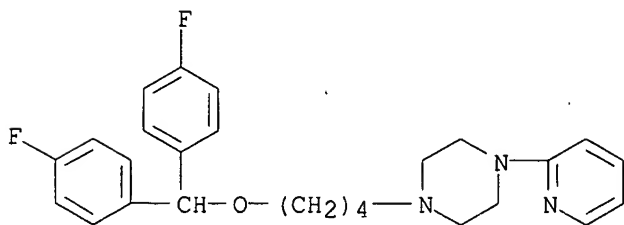
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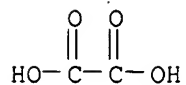
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CM 2

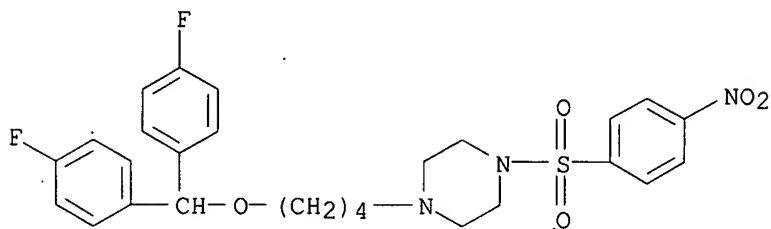
CRN 144-62-7
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RN 728946-16-5 HCAPLUS
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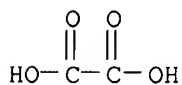
CM 1

CRN 728946-15-4
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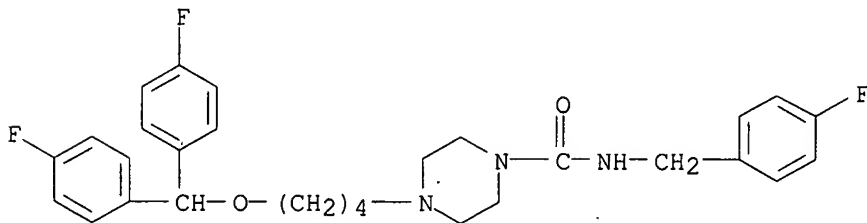


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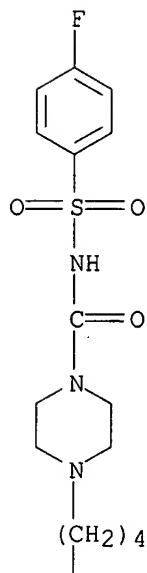


RN 866006-23-7 HCAPLUS
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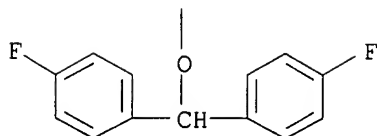


RN 866006-25-9 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-N-[(4-fluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IT 728945-84-4P, 1-[4-[Bis(4-fluorophenyl)methoxy]butyl]piperazine
 dioxalate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (drug candidate; preparation of diagnostic and therapeutic alkyl
 piperidine/piperazine compds. for neuron imaging and treating
 neurodegenerative disease)

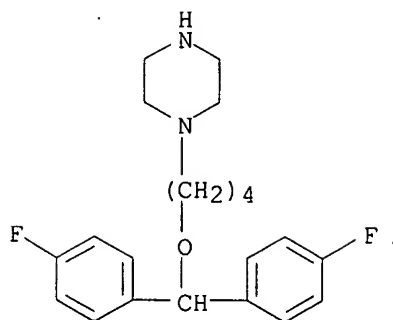
RN 728945-84-4 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-, ethanedioate (1:2)
 (9CI) (CA INDEX NAME)

CM 1

CRN 728945-83-3

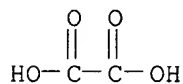
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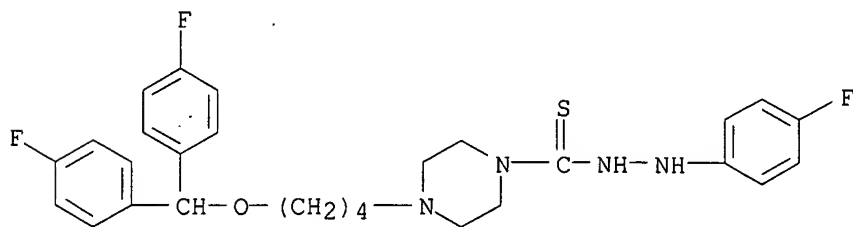
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CRN 144-62-7

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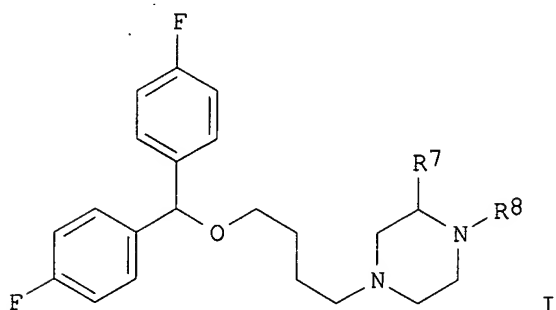


IT **866006-41-9D**, complexes with technetium-99m or iodine isotopes
 RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
 (preparation of diagnostic and therapeutic alkyl piperidine/piperazine
 compds. for neuron imaging and treating neurodegenerative disease)
 RN 866006-41-9 HCAPLUS
 CN 1-Piperazinecarbothioic acid, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]-,
 2-(4-fluorophenyl)hydrazide (9CI) (CA INDEX NAME)



L50 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:606436 HCAPLUS
 DN 141:157135
 TI Preparation of piperidine and piperazine derivatives with dopaminergic
 neurotransmitter system activity for diagnostic and therapeutic uses
 IN **Elmaleh, David R.; Choi, Sangwoon; Fishman, Alan**
J.
 PA The General Hospital Corporation, USA
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

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GI					



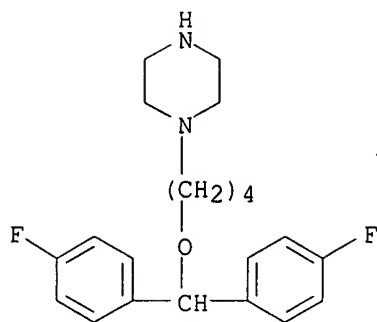
AB Piperazine derivs., such as I [R7 = H, Ph, :O; R8 = H, Ph, COMe, CPh, halophenyl, nitrophenyl, nitrophenylsulfonyl, piperonyl], were prepared for use in treating neurodegenerative diseases characterized by the lack of dopamine neurons activity or for imaging the dopamine neurons. Thus, piperazine derivative II (R7 = R8 = H) was prepared via an amination reaction with 30% yield of (F-4-C6H4)2CHO(CH2)4Cl and piperazine using K2CO3 in DMF. The prepared piperazines were assayed. for binding affinities at the DA, 5-HT and NE transporters labeled with [125I]RTI-55.

IT **728945-83-3P**

RL: DGN (Diagnostic use); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of piperidine and piperazine derivs. with dopaminergic neurotransmitter system activity for diagnostic and therapeutic uses)

RN 728945-83-3 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]- (9CI) (CA INDEX NAME)



IT 728945-84-4P 728945-85-5P 728945-86-6P
 728945-87-7P 728945-88-8P 728945-89-9P
 728945-90-2P 728945-91-3P 728945-92-4P
 728945-93-5P 728945-94-6P 728945-95-7P
 728945-96-8P 728945-97-9P 728945-98-0P
 728945-99-1P 728946-00-7P 728946-07-4P
 728946-08-5P 728946-09-6P 728946-10-9P
 728946-15-4P 728946-16-5P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine and piperazine derivs. with dopaminergic neurotransmitter system activity for diagnostic and therapeutic uses)

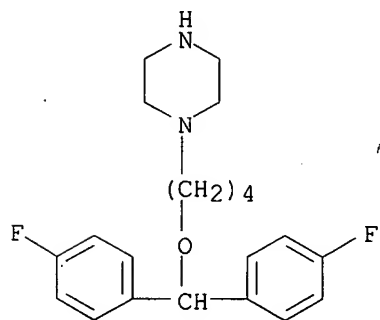
RN 728945-84-4 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

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CRN 728945-83-3

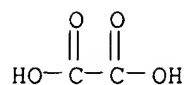
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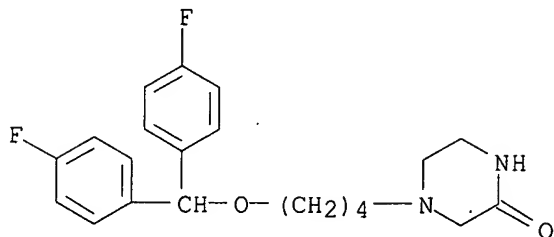
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RN 728945-85-5 HCAPLUS

CN Piperazinone, 4-[4-[bis(4-fluorophenyl)methoxy]butyl]- (9CI) (CA INDEX NAME)



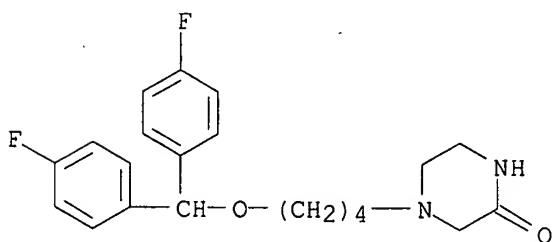
RN 728945-86-6 HCAPLUS

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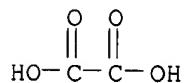
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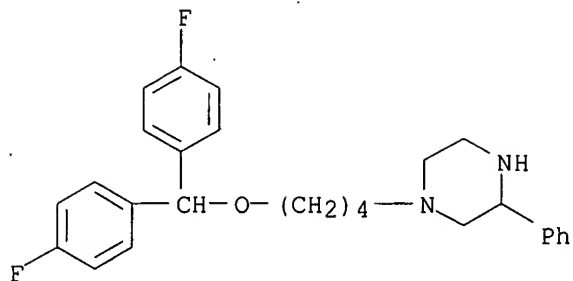
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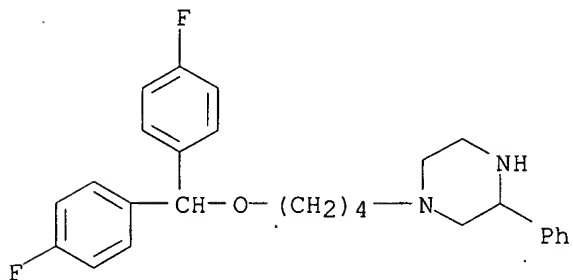
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-3-phenyl- (9CI) (CA INDEX NAME)



RN 728945-88-8 HCAPLUS
 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-3-phenyl-,
 ethanedioate (1:1) (9CI) (CA INDEX NAME)

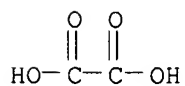
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CRN 728945-87-7
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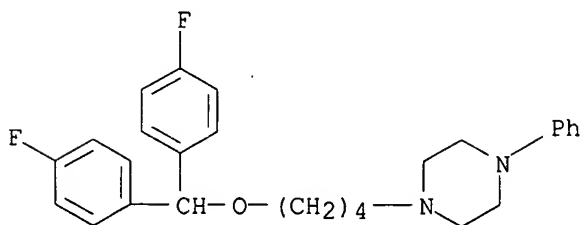


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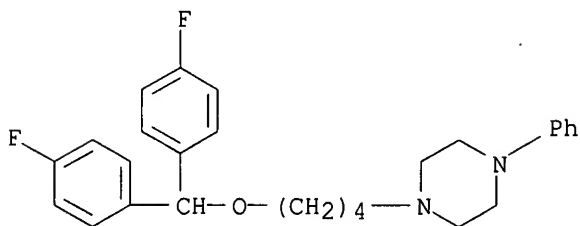
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 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-phenyl- (9CI) (CA
 INDEX NAME)



RN 728945-90-2 HCAPLUS
 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-phenyl-,
 ethanedioate (1:1) (9CI) (CA INDEX NAME)

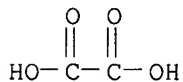
CM 1

CRN 728945-89-9
 CMF C27 H30 F2 N2 O

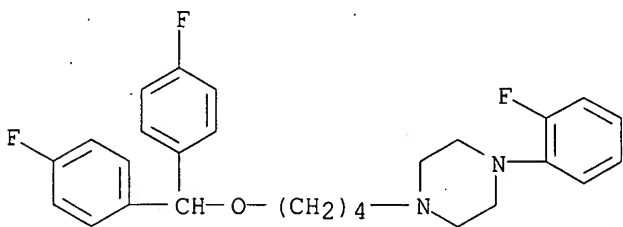


CM 2

CRN 144-62-7
 CMF C2 H2 O4



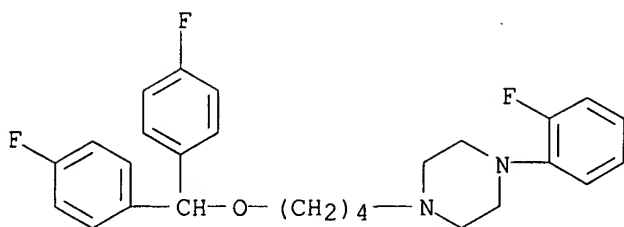
RN 728945-91-3 HCAPLUS
 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-fluorophenyl)-,
 (9CI) (CA INDEX NAME)



RN 728945-92-4 HCAPLUS
 CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-fluorophenyl)-,
 ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

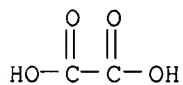
CRN 728945-91-3
 CMF C27 H29 F3 N2 O



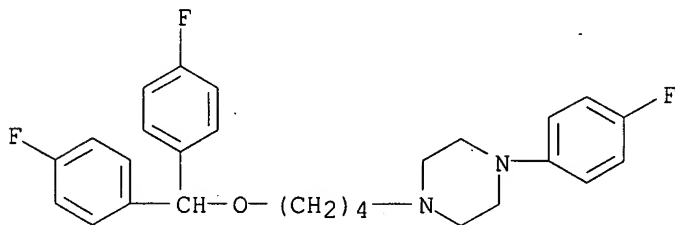
CM 2

CRN 144-62-7

CMF C2 H2 O4



RN 728945-93-5 HCAPLUS

CN Piperazine, 1-[4-[[bis(4-fluorophenyl)methoxy]butyl]-4-(4-fluorophenyl)-
(9CI) (CA INDEX NAME)

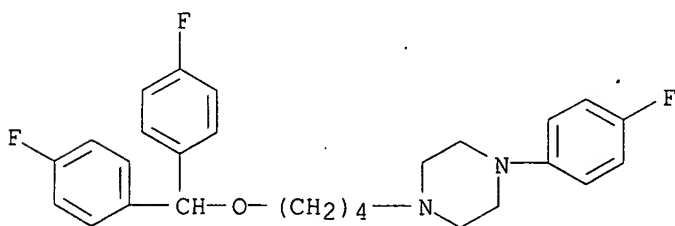
RN 728945-94-6 HCAPLUS

CN Piperazine, 1-[4-[[bis(4-fluorophenyl)methoxy]butyl]-4-(4-fluorophenyl)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

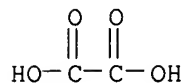
CRN 728945-93-5

CMF C27 H29 F3 N2 O

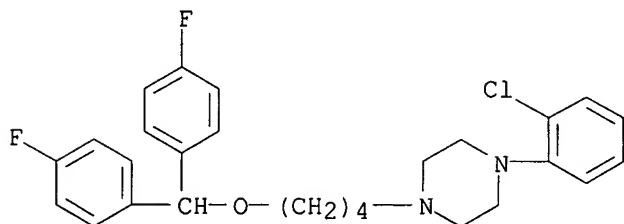


CM 2

CRN 144-62-7
CMF C2 H2 O4



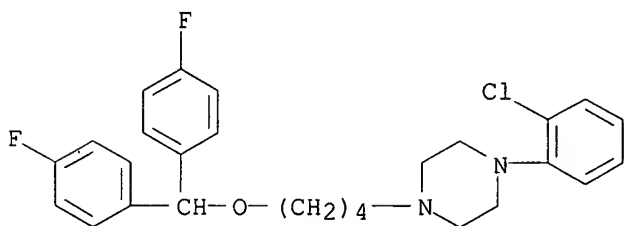
RN 728945-95-7 HCAPLUS
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-chlorophenyl)-
(9CI) (CA INDEX NAME)



RN 728945-96-8 HCAPLUS
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-chlorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

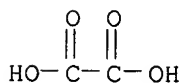
CM 1

CRN 728945-95-7
CMF C27 H29 Cl F2 N2 O

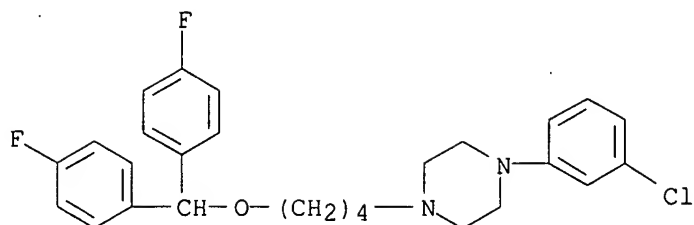


CM 2

CRN 144-62-7
CMF C2 H2 O4



RN 728945-97-9 HCAPLUS
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(3-chlorophenyl)-
(9CI) (CA INDEX NAME)



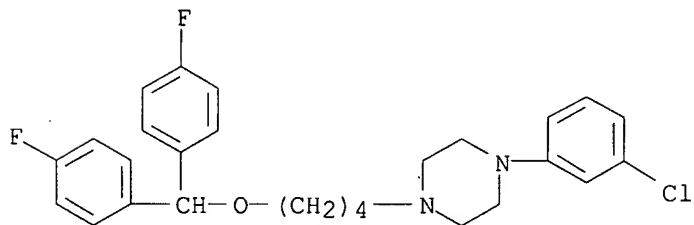
RN 728945-98-0 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(3-chlorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-97-9

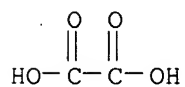
CMF C27 H29 Cl F2 N2 O



CM 2

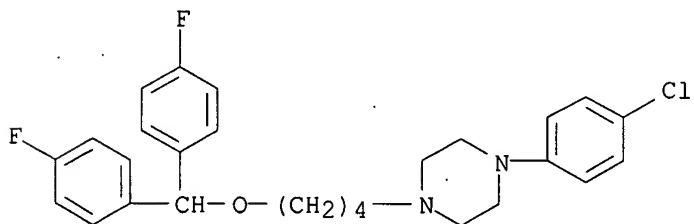
CRN 144-62-7

CMF C2 H2 O4



RN 728945-99-1 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-chlorophenyl)-, (9CI) (CA INDEX NAME)



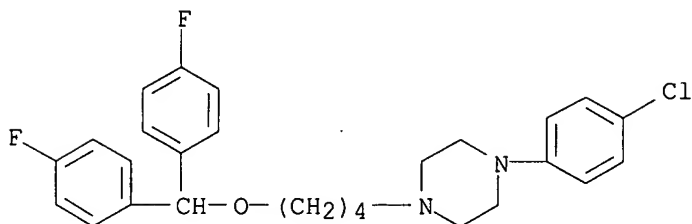
RN 728946-00-7 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-chlorophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728945-99-1

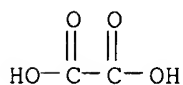
CMF C27 H29 Cl F2 N2 O



CM 2

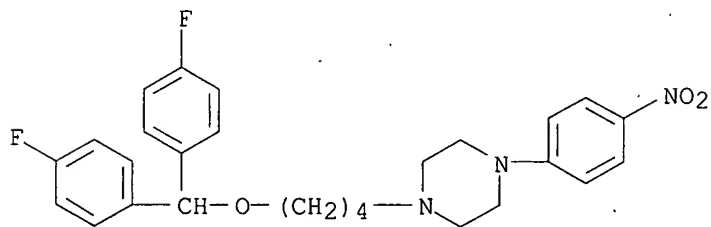
CRN 144-62-7

CMF C2 H2 O4



RN 728946-07-4 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-nitrophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)



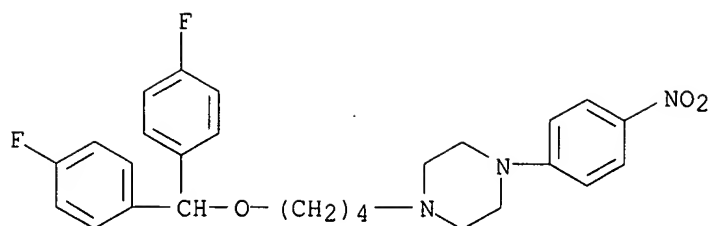
RN 728946-08-5 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(4-nitrophenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 728946-07-4

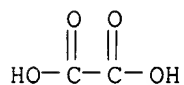
CMF C27 H29 F2 N3 O3



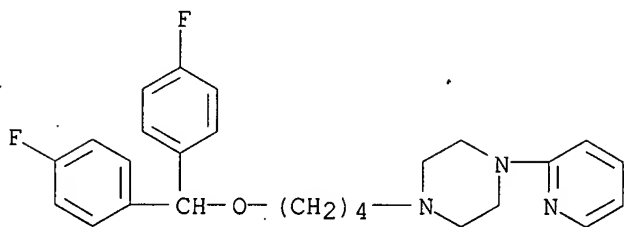
CM 2

CRN 144-62-7

CMF C2 H2 O4



RN 728946-09-6 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-pyridinyl)- (9CI)
(CA INDEX NAME)

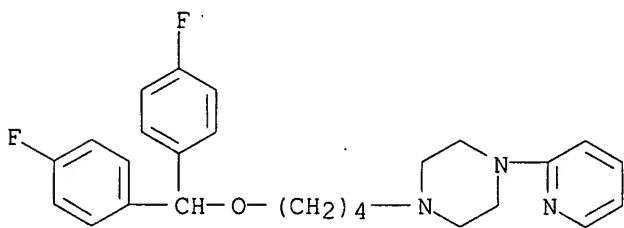
RN 728946-10-9 HCAPLUS

CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-(2-pyridinyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

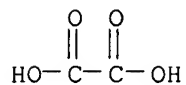
CRN 728946-09-6

CMF C26 H29 F2 N3 O

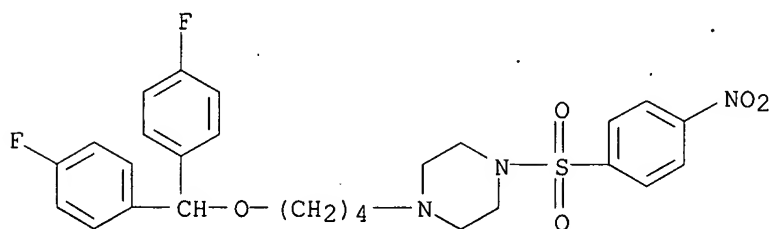


CM 2

CRN 144-62-7
CMF C2 H2 O4



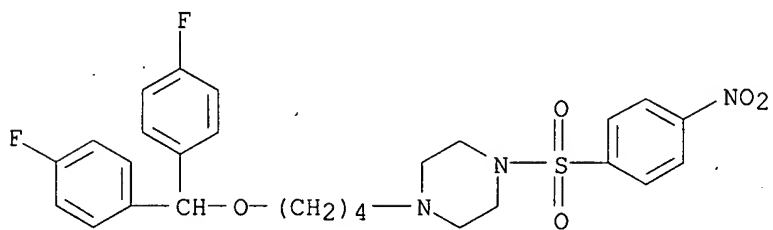
RN 728946-15-4 HCAPLUS
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-[(4-nitrophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 728946-16-5 HCAPLUS
CN Piperazine, 1-[4-[bis(4-fluorophenyl)methoxy]butyl]-4-[(4-nitrophenyl)sulfonyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

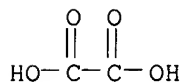
CM 1

CRN 728946-15-4
CMF C27 H29 F2 N3 O5 S



CM 2

CRN 144-62-7
CMF C2 H2 O4



=> d his

(FILE 'HOME' ENTERED AT 07:11:07 ON 07 MAR 2007)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:11:20 ON 07 MAR 2007

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E ELMALEH/AU
L2 137 S E8-E11
E SONGWOON/AU
L3 1 S E4
E SONG WOON/AU
L4 2 S E3
E CHOI/AU
L5 7 S E3
E CHOI S/AU
L6 482 S E3
L7 93 S E30
E CHOI SONG/AU
L8 10 S E3
E CHOI NAME/AU
L9 92 S E4
E SONG/AU
L10 5 S E3
E SONG W/AU
L11 97 S E3, E5
E SONG NAME/AU
L12 31 S E4
E FISHMAN/AU
L13 20 S E4, E7, E16, E17
SEL RN L1

FILE 'REGISTRY' ENTERED AT 07:14:21 ON 07 MAR 2007

L14 77 S E1-E77
L15 STR
L16 50 S L15
L17 2681 S L15 FUL
SAV L17 SACKKEY814A/A
L18 STR L15
L19 10 S L18 SAM SUB=L17
L20 162 S L18 FUL SUB=L17
SAV L20 SACKKEY814B/A
L21 STR L18
L22 2 S L21 SAM SUB=L20
L23 16 S L21 FUL SUB=L20
SAV L23 SACKKEY814C/A
L24 12 S L23 NOT NC3-NCSC3/ES
L25 4 S L24 NOT 2 3 DIOXO
L26 3 S L25 NOT C35H36N4O3
L27 13 S L23 NOT L26
L28 STR L15
L29 50 S L28 SAM SUB=L17
L30 788 S L28 FUL SUB=L17
SAV L30 SACKKEY814D/A
L31 STR L28
L32 5 S L31 CSS SAM SUB=L30
L33 42 S L31 CSS FUL SUB=L30
SAV L33 SACKKEY814E/A
L34 18 S L33 AND (C31H36F2N2O5 OR C28H30F3N3O4S OR C29H32F2N2O2 OR C27
L35 24 S L33 NOT L34
L36 27 S L26, L35

L37 15 S L14 AND L36
L38 12 S L36 NOT L37

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L39 0 S L36

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L40 2 S L36
L41 2 S L40 AND L1-L13
E SANG/AU
L42 2 S E3
E SANG 2/AU
E SANG W/AU
L43 3 S E3
E SANG WOON/AU
E SANG NAME/AU
L44 1 S E4
E SANGWOON/AU
E CHOI/AU
L45 7 S E3
E CHOI S/AU
E CHOI SANG/AU
L46 3 S E3
E CHOI SANG W/AU
L47 147 S E3,E4,E7
E CHOI SANGW/AU
L48 1 S E6
L49 1 S L40 AND L42-L48
L50 2 S L40,L41,L49

FILE 'USPATFULL' ENTERED AT 07:36:46 ON 07 MAR 2007
L51 1 S L36

FILE 'REGISTRY' ENTERED AT 07:37:00 ON 07 MAR 2007

FILE 'USPATFULL' ENTERED AT 07:37:23 ON 07 MAR 2007

FILE 'HCAPLUS' ENTERED AT 07:37:39 ON 07 MAR 2007

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